

Marketing of Maize Products in Bangladesh: A Value Chain Analysis

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Abstract

Agricultural products are a lucrative field of new product development in Bangladesh, which may become a new need discovery. The extant literature on new product development has focused on how a firm may successfully create a value chain and position it in market. Maize is among the key commodities for food security in Bangladesh. Its value chain would benefit from better regional trade integration throughout the country and continues to be hampered by multiple market and institutional failures. A frame work for managing the value chain is being created to minimize new product failure. The study focuses on how other participants may indeed influence the development of new products and create a successful value chain plan. This signifies the potential benefits and the opportunities existing in Bangladesh for the sector of maize.

Keywords: New product development, Hierarchy, Agro-based firms, Agricultural marketing,

1. Introduction

Bangladesh economy is highly agriculture-based, in which maize has become one of the key commodities for food security in recent days. Besides other agricultural crops, maize creates an emerging demand in the food sector of the country. Value chain of maize is expanding due to demand-pull from the poultry sector, brewery and other agro-industrial products. Hence, it is imperative to explore the possibilities of maize market and effectively propose ideas on marketing and value chain on it. The analysis of marketing systems, particularly value chain analysis provides the full range of activities which are required to bring a product from conception, through the primary phases of production and delivery to final consumers (Kaplinsky and Morris, 2000). With this flow of products from producers to consumers, the marketing system is developed. Marketing systems play a significant role in enhancing production and consumption, and in accelerating the pace of economic development (Huda, Karim and Khan, 2012). Maize consumption has increased for both rural and urban consumers despite the creation of demand to higher-quality and processed products in urban regions mainly. This has occurred along with the emergence of an urban middle-class in the district areas of the country, for which local supply has not yet responded. Following the increased diffusion of mills and milling, maize flour consumption as a first source of starchy food has been time-saving for most urban households.

New products serve as a significant element for the economy. It drives the long-term growth of organizations, and eventually leads to long-standing economic welfare of societies. In an effort to confront the challenges Bangladeshi maize farmers continue to face, new opportunities can be created. Proper effort to integrate farmers into the maize value chain can help generate new opportunities in existing or new markets. This will include increasing production and resource productivity and improving access to post-harvest marketing opportunities in order to achieve more competitive maize production and development of new market of maize business.

2. Justification for the Research

From the past few years, the production of maize has increased remarkably. The concept of food habit and lifestyle of people have changed somewhat. So diverting their food habit towards maize products has great potential. While implementing this, related people might exploit this opportunity and market maize products to increase sales and profits. This project aims to help farmers, supply chain related people and marketers by focusing on the ways for developing a new market for maize products and identifying profitable customers. A new impressive image can be built through various new sub-products of maize and new needs can be created in consumer life using marketing tools. This will help identify the factors that influence buyers to purchase and accept more maize products as part of their daily food habit. The present study focuses on creation of a value



chain which might result high value added export oriented agro-based industries, focusing maize. The farmers generally sell their maize produces from their homes or in the closest primary/assembly markets.

3. Literature Review

3.1 Agro-Business Sector in Bangladesh:

Agro-based economy prevails in Bangladesh as 32% of its gross domestic product (GDP) is dedicated by agriculture absorbing 63% of its labour force. (http://www.assignmentpoint.com/business/economics/economy-development-in-bangladesh.html). Sustained government investment in irrigation facilities, rural infrastructure, and agricultural research and extension services made agriculture the backbone of this developing nation. The rich & fertile land of the country provides numerous types of rich vegetation. The Agribusiness sector, being composed of industries those are directly and indirectly involved in production, transformation and provision of food, fibres, chemicals and pharmaceutical substrates has a value chain. The agribusiness value chain is the outcome of agribusiness education and production of commodities such as meat, grains, aquaculture, other animal products, horticultural produce, plant and animal fiber, agri-forestry, etc. Value adding activities include transformation of agricultural commodities by processing, preparation, packaging and distribution.

3.2 Origin of Maize in Bangladesh:

Before independence in 1971, maize was rarely cultivated across Bangladesh except in a few tribal areas of Southern Chittagong Hill Tracks (ageconsearch.umn.edu/bitstream/56106/2/bangladesh.pdf). After the creation of Bangladesh Agricultural Research Institute (BARI) in 1976, maize has become an emerging key mandate crop of BARI and programs were developed for crop improvement, crop management, and subsequent are expansion. Despite their various steps, progress was slow and by early 1990s still only a few farmers adopted the crop, mainly because Bangladeshis were not accustomed to mix maize flour with wheat for local consumption in chapatti flat bread. Nevertheless, as an aftermath of the rapid expansion of poultry industry in 1990 and 2000s, the demand for maize grain as poultry feed increased many fold. Following this trend, imported seed were used to grow excellent high yield crops and led to huge potential for hybrid maize in the country. During the last one and half decade, maize became a lucrative cash crop with a huge and expanding market demand, particularly to the farmers of northern and western Bangladesh.

3.3 Prospect of Maize Products in Bangladesh:

Marketing of maize in Bangladesh typically passes through six stages: growers, assembly beparis (traders), distributing beparis, aratdars (commission agents)/cum wholesalers-retailers-consumers. The stages are not all distinct and an agent in one stage can interact with several agents operating at different stages of marketing. The maize farmers are deprived of the desired price due to lack of market information at the growers' level. Study on maize marketing has become crucial to Bangladesh agribusiness, because of the following reasons: Stagnation of the sector, despite extensive Governments efforts with respect to seed-fertilizer water technology.

Maize grain consumption (currently about 1.2 million t/year) in Bangladesh is directly related to poultry industry. Given the fact that, the large poultry industry producing about 220 million chickens, 37 million ducks, and around 6 billion eggs annually, there are 5 million workers working for the industry and millions of family rely on it for income generation and nutrition, the growth rates are spectacular with growing populations' per capita need for more chicken and egg. Besides these, maize is also used in cattle and fish feed. The consumption of poultry and maize grain in Bangladesh could possibly be double or triple in next 10 years. The demand for maize poultry expected increase about 15% 2030 (ageconsearch.umn.edu/bitstream/56106/2/bangladesh.pdf). The projection indicates that maize production has bright future in Bangladesh; if other conditions remain favourable. Maize is the third most important cereal crop in Bangladesh, after rice and wheat. It is a major cash crop, and is one of the major sources of employment of Char dwellers, especially for smallholders and women. Maize is cultivated in almost all the districts of Bangladesh except in Narail District (DAE, 2010). Much like in the case for seeds, the gap in the maize market is filled by imports. Thus price prevails at import parity where world corn price dominates in the domestic market as well. Bangladesh usually imports from regional and neighbouring countries, such as India and Myanmar, which have surplus maize production. At present maize is grown on only about 16.2 thousand



hectares in the country (Quasem;1999). Of the existing coverage Rajshahi Division has the largest share (60%); followed by Dhaka Division (20%). In these two divisions all the districts are again not equally advanced. Prominent districts among them are Dinajpur, Dhaka, Bogra, Rangpur, Mymensingh and Kushtia that have experienced faster rates of growth in maize cultivation. In three of these districts, Dinajpur, Bogra and Rangpur, wheat cultivation has increased along with maize.70% of the population of the country depends on agriculture for their income. Needless to say, agriculture- if properly planned can change the fate of many small farmers. But for crop harvesting to be successful, regional geography should be a primary concern. Bangladesh has a varied geography. Wetlands, hills, plains, riverbanks- the country boasts having all sort of geographical characteristics mashed up in one place. This diversity needs to be taken into account. (Bhuiya & Mohiuddin, 2013) For example- Maize farming has improved the lives of thousands of farmers in the greater northern region. Owing to this, a full-fledged supply chain of maize production has flourished, creating more employment opportunities. (Dev & Nuruzzaman, 2006).

Nevertheless, just like cereal supply chains in general, maize value chain development is hindered by several constraints affecting productivity and competitiveness. Many studies have shown that dry cereals (maize, sorghum, millet) have a greater potential to serve urban markets than they do currently and can substitute for imports contributing to greater food security. Moreover, cereal value chains serve several market segments such as the growing animal feed market and agro processing (including beverages).

3.4 Value chain analysis

Value Chain Analysis is a valuable instrument through which managers can create the greatest possible value for their organizations by defining a firm's core competencies and activities. This in turn helps them attain a sustainable competitive advantage in terms of cost advantage by having a stronger control over costs and compressing them out of the value-adding activities; or by achieving differentiation to perform better than competitors. The value chain framework of Porter (1990) is "an interdependent system or network of activities, connected by linkages" (p. 41). When the system is managed carefully, the linkages can be a vital source of competitive advantage (Pathania, 2001). The linkage takes place between the value of activities within the organization and its key functional components, which is followed by precise assessments of the overall value addition made by these components.

According to Seminar für Ländliche Entwicklung (SLE) publication series (2008), the value chain is a development concept with two main perspectives (Koenig et al., 2008). The functional perspective of value chain discusses on the series of related business activities-including specific inputs, production processing, marketing and consumption; while the institutional perspective recognizes the value chain as a set of players or institutions which perform activities linked with various business transactions.

Similarly, Gibbon (2001) described a value chain as a chain of activities, where products pass through all activities of the chain in that order and at each activity, the product gains some value. The chain of activities gives the products an "added value" in a synergistic manner. Nevertheless, the author drew a fine line between the value chain concept and the cost occurring throughout the activities. In the case of maize production, the agronomical practices such as usage of pesticides, purchases of special processing and storage facilities incur costs but the activity as a whole adds a greater value to the end-products.

Businesses gain profit and worth by "adding value" to inputs and turning them into something of worth to people. Porter used the term 'margin' for the difference between the total value and the cost of performing the value activities. Here, 'total value is referred to as the price that the customer is willing to pay for a certain offering (Macmillan et al, 2000). Other scholars have used the word 'added value' instead of margin in order to describe the same (Lynch, 2003). In services, however, inputs, such as time, knowledge, equipment, and systems are used to create services of real value to the customers- both internal and external. In either case, the more value an organization creates, the more people will be willing to pay for its product or service, and more likely they will turn to its repeat customers. Value Chain Analysis helps explore the avenues for value creation for an organization's customers, and then to maximize this value. To remain successful in competitive market, a company must have a clear understanding on its own competence level and its market needs. Efficient



management of its value chain optimally impacts its profitability, as customers' perceived value for the product or service exceeds its relative cost of activities.

The value chain is however, a time-consuming method. The logic and validity of the proven technique of value chain analysis has been rigorously tested, therefore, it does not require the user to have the same in-depth knowledge as the originator of the model (Macmillan et al., 2000). Value chain analysis starts with breaking down the key activities of a company to the activities entailed in the framework. It then evaluates the impact of value additions in terms of either cost advantage or better differentiation. The most critical stage is to establish strategies tailored to those activities to achieve sustainable competitive advantage.

Scrutinizing the impact of production and support activities of a company on enhancing the competitive advantage, Michael Porter (1990) observed that, competitive advantage can emerge from judicious designing, production, marketing, delivering and supporting of a product or service. Companies have been using his outline to explore the value creation by the activities performed by business units, scrutinize the modus operandi of value creation due to the linkages between the external buyers and suppliers, allocate resources to align with strategies towards strategic direction, strengthen the most critical activities towards effective strategy, and pass up less critical tasks.

Despite the significant value addition to organization's ability to work with the buyer-supplier relationships by Porter's preliminary framework, he presaged against "applying value chain analysis at too high a level in an organization". He argued that an industry will contain various segments with variations in procedures and economic relationships and dynamics. As a result, tangible interrelationship between the business units established by the value chain analysis often fails to achieve synergy. The framework also fails to understand the vibrancy associated with high clock-speed industries that redefine their value chain relationships ad infinitum. This can be resolved to a great extent by considering the cost coordination along with organizational expediency while formulating strategy.

Based on these limitations, we set out to analyze the value chain of maize and create a framework that will allow us to formulate these economic relationships and the dynamics that influence the devise and infrastructure value chain.

Value chain is depicted as the modus operandi of a system consisting of subsystems such as inputs, transformation processes and outputs. The subsystems engross acquisition and consumption of various resources including money, labor, materials, equipment, buildings, land, administration and management. Organizations employ in numerous activities in the process of converting inputs to outputs. These activities can be classified as either primary or support activities that businesses undertake in some form.

The primary value chain activities (Porter, 1985) of a company include the following:

- Inbound logistics: The receiving and warehousing of raw materials, and their distribution to manufacturing as they are required. For example, seeds and pesticides from input supplies stockiest.
- Operations: The processes of transforming inputs into finished products and services. For example, the operation in case of maize industry includes farm preparation (ridging, planting, weeding, harvesting, handling, processing etc.
- Outbound logistics: The warehousing and distribution of finished goods. For example, in case of a
 maize industry activity would entail the ways product is sold to customer, customer care costs and
 handling.
- Marketing and sales: The identification of customer needs and creating awareness among the target
 audience of the company about the firm's products and services. Maize companies should make use of
 marketing communications tools like advertising, sales promotions to attract customers towards their
 products and Service. There is often a need to provide services like pre-system or after-sales service
 before or after the sale of the product or service.

These primary activities are supported by:

• The infrastructure of the firm: this ties various parts of a firm together, including departmental functions such as accounting, legal, finance, planning, public affairs, government relations, quality assurance and general management.



- This includes planning and control systems, such as finance, accounting, and corporate strategy etc. (Lynch, 2003). Famers should be trained to keep records of production costs so that they can associate with earnings and profit accrued from a particular business.
- Human resource management: employee recruiting, hiring, training, development, and compensation.
 Human resources are increasingly becoming an important way of attaining sustainable competitive advantage
- Technology development: this area is concerned with technological innovation and knowledge. Farmers
 must be equipped with modern technology in production and processing, packaging of the value added
 products.
- Procurement: purchasing inputs such as materials, supplies, and equipment for purchasing the materials that are necessary for the company's operations.

The outcomes can be related with Porter's Value Chain which includes:

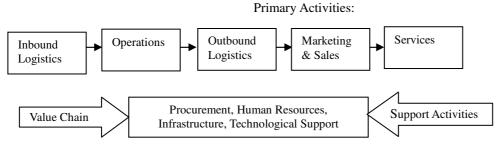


Diagram 1: Porter's Value Chain

3.5 Maize processing actor

Corn is the highest produced cereal in the world that is used for human consumption, livestock feed, and fuel. Various forms of maize flours including precooked refined maize flour, dehydrated nixtamalized flour, fermented maize flours and various corn meals are commercially manufactured. Using food technologies, vitamin and mineral contents are generated during the processing of raw grains to the consumer final products. While the mechanical processing of dry maize processing creates whole or fractionated products, the same separates the chemical compound including starch and protein in the wet maize. The three sectors of maize production are as follow:

- Primary sector: Input suppliers, producers and silo owners play the key role in here. Silo owners facilitate safe storage of maize and ensure round-the-year supply to the buyers.
- Secondary sector: Millers and animal feed manufacturers are the actors in this stage. Millers transform
 raw grains to maize meals for human consumption. The animal feed manufacturers use the yellow
 maize for producing broiler and layer feed rations. They also convert the white-maize to hominy chop
 to use in feedlots.
- Tertiary sector: Traders, retailers and transporters are the key people at this stage. Traders help shift the produce to either local or export market. Traders can further be split into three subcategories, as in the hedgers, arbitrageurs and speculators. While hedgers take the help of financial tools such as futures and options for defend existing portfolio against any unfavorable market volatilities; arbitrageurs look for making money from the price differentials of maize in various markets; and the speculators checks on ways to make profits by taking the advantage of short-term price fluctuations. The retailers facilitate distribution of maize products from millers to final consumers by providing necessary infrastructure and services. The transporters ensure movements of maize from farmers to silo owners then to millers and also from the agents to final consumers.

4. Research Objectives and Issues

The prime objectives of the proposed research are to analyze the product development strategy taken for the maize markets and to identify marketing effort in the context of Bangladesh. The specific objectives are outlined below.



- To find out the opportunities existing in the market for maize products
- To understand the marketing strategies of maize product offerings
- To identify the new potential strategies for the value chain system for maize products for future development of this industry.

5. Research Design and Methodology for the Study

The purpose of this paper is to provide a background context to discussions that will define further work in the area of agro-food value chain system innovation. Its primary focus is on creation of value chain of maize market. It has been developed through literature searches and informal discussion with individuals experienced in the agro-industry. Mainly qualitative data is being considered for this study. The primary target is to explore the possibilities of maize in Bangladesh and identifying strategies to create a successful marketing and value chain design.

A discussion on innovation, in particular food-product innovation, and its magnitude in business and society mandates a clear understanding of its meaning. Hence, for the purpose of empirical research, an experience survey is being conducted. In regard to data collection, various farmers, entrepreneurs, marketers, and people related with supply chain were interviewed and their strategies were examined. Mainly, the intention was to learn the effective way to develop a value chain option for this sector, which will accelerate growth of the industry.

5.1. Sources of Data

As data is collected from both primary and secondary sources, hence, two approaches, namely literature review and interview, are being applied for the study. This study involved interviews with various role-players and stakeholders in the respective sectors, including farmers and other related practitioners. For the purpose of analysis available literature and other published materials are being consulted. Extensive Internet searches and secondary sources books and journals are being reviewed.

5.2. Sampling Techniques

The research made use of the descriptive survey method. The sampling techniques adopted for this study include the convenience sampling (also known as the accidental sampling) and the purposive sampling. The justification for this sampling technique results from situations of respondents' unwillingness to supply information into the research instrument, therefore leading to selection of respondents who are willing to respond at the instance of approaching them. A major advantage of the chosen sampling techniques is that they produced an unbiased answer from respondents since they willingly accepted the interview. The choice of the study was largely influenced by cost of survey, time, logistic problems and accessibility. Therefore, the study area was chosen by purposive sampling method. Data used for this study was obtained from both primary and secondary sources.

5.3. Data Collection Techniques and Analysis Plan

A focus group discussion was conducted with two groups consisting 10 people. It included farmers, entrepreneurs, marketers, people related with supply chain. They were asked about their perceptions, opinions, challenges, possibilities, ideas, beliefs and attitudes towards maize products and its prospects in Bangladesh. Three types of questions were moderated to create an environment to get the feedback.

First, the participants were introduced to the topic of discussion and made comfortable with some Engagement Questions. Second, with the help of Exploration Questions, the main ideas and themes were discovered. Third, the Exit Questions were utilized to cross-check if anything was missing in the discussion. Additional texts were added as the research proceeds.

6. Data Analysis and Findings

6.1. Value Chain development of maize market:

The maize value chain would benefit from better regional trade integration throughout the country. Increased intra-regional trade in maize would have several multiplier effects on maize value chain. Besides more



remunerative prices for the producers and improved standards, greater intra-regional maize trade would stimulate public and private investments in research, marketing, agricultural services and infrastructures. Therefore, addressing the existing barriers to intraregional trade is a priority concern for maize value chain development. The possibilities that came out from the focus group discussion are:

- a. New maize varieties for the poor: New improved maize varieties are seen as a critical vehicle to enhance the lives of the poorest producers and consumers across the target geographies of maize. New improved maize varieties include high-yielding, nutritionally enhanced and stress-tolerant hybrids and open-pollinated varieties (OPVs). Currently, many smallholder farmers across the country use low-yielding, nutritionally poor varieties/landraces, which are susceptible to major abiotic (heat and drought) and biotic (fungal, bacterial and viral) stresses and insect pest (stem borers, etc.).
- b. New tools and methods for national institutions, entrepreneurs and farmers: Novel tools to give small- and medium-scale public and private seed enterprises in developing countries the same tools as multinational enterprises, so that they can meet unfulfilled demand niches, especially for smallholders.
- c. Quality maize supply to industrial buyers: While there have been noteworthy gains made in maize production over the past decade, there is a significant opportunity to further increase quality productivity. Quality maize is one of the most important cereals in terms of production and supply to industrial buyer. Estimates indicate that the current maize yield could be doubled if farmers adopt higher quality inputs and proven agronomy best practices.
- d. Collaboration with corn-based food processing industry: Collaboration with different food processing manufactures for establishment of corn-based food processing industry in the northern zone of country is another endeavour of the project. Various products for both human and animal consumption are produced from corn dry milling. For example, human-grade corn can be processed into meal, flour, oil, and hominy.

6.2. Financial Inclusion

Lack of access to credit has been afflicting poor farmers and rural dwellers for many years. Rural people need credits to initiate investment in their farms and small businesses, to consume smoothly, and to reduce the vulnerability of weather and economic shocks. Because they have little access to formal financing institutions, poor rural people follow suboptimal risk management and consumption strategies and rely on costly informal credit sources. Recognizing this, governments and international agencies created banks and lending programmes targeted at rural farmers. Reforms and innovations have emerged in recent years to improve credit market opportunities for the rural farmers and increase the efficacy of rural finance. Millions of smallholder farmers close to poverty and rely on agriculture for their livelihoods. Agriculture is fundamental to poverty reduction, drive economic transformation and ensure economical growth. For agriculture to work better and improve the livelihoods of the rural poor, the financial services need to team up to diversify poor people's source of livelihoods and reduce hunger; act more resilient to periodic shocks, and prevent them from falling into poverty traps. The rural economy requires a wide range of financial services and products, and no single type of financial institution is capable of efficiently providing such a broad range for agriculture development. Microfinance, for example, can help meet the short-term needs of farmers and other low-income residents and help to finance micro-businesses though it is not so suitable for larger businesses or for the accumulation of capital and innovations to raise productivity.

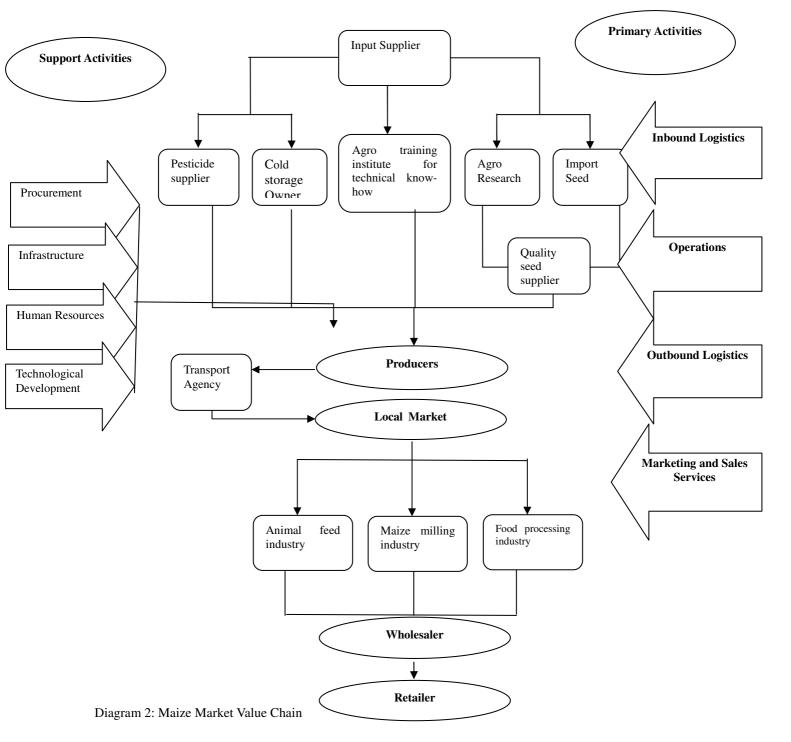
6.3 Value Chain facilitator of Maize Market

The maize market value chain can be broken down into the following levels:

- Producers of maize (farmers);
- Seed supply parties: Producers of quality seed, Retailers of seed (Direct agent from manufacturer or indirect local representative of manufacturer).



- Financial Intermediaries (Bank, insurance).
- Silo owners (addressing technical know-how);
- Traders in maize (who market and sell maize);
- Agro Training institute for scientific cultivation- harvesting –storage.
- Millers of maize (people who convert maize into usable form);
- Maize processing institut



6.3. Maize Value Chain Tree

The following diagram (Diagram 2) represents the various products and by-products that can be derived from maize which is the major area for market development in Bangladesh. Maize kernels are refined to maize meal and, the products that can be derived from this process are samp, maize grits, and maize rice, un-sifted, sifted,



coarse, super and special maize meal. Wet milling is a process that is carried out in water during which pure starch is obtained from maize.

The value chain tree is given below:

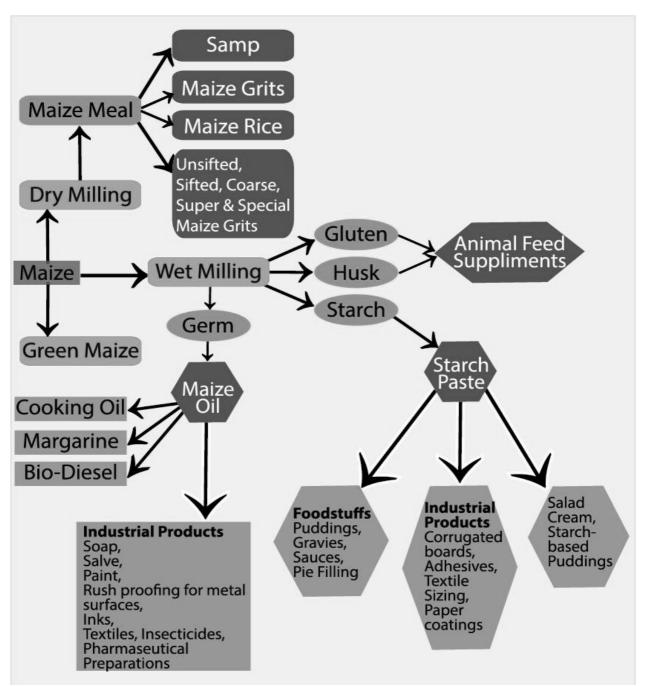


Diagram 3: Maize Value Chain Tree

6.4. Possibilities of Maize products

Maize production in Bangladesh is competitive in a sense that, it is more profitable to produce dry-cereals locally than to import those at reference prices. Hence it is lucrative from a social welfare standpoint as well. However, self-sufficiency in maize does not necessarily imply that quantities are available all over the country



throughout the year. Further, trade restrictions for food security and underlying political purposes neither add value nor benefit the farmers and traders from higher prices. Better management of storage and safety nets policies also can help implementing more efficient food-security policies, and simultaneously, facilitate trade and private development of the value chains. However, competitiveness can be scaled up significantly. Two nodes of the chain could benefit from scaled-up modernization techniques, i.e., improved market and business environment, and superior investment incentives. Also, there are two factors to facilitate competitiveness.

- (i) Farmers' productivity: It has been shown that farm modernization through farmers' adoption of more technologically advanced packages (e.g. early cultivars, fertilizers, manure, animal traction) together with appropriate extension of services can lead farmers to amplify their productivity, and notably for maize which is the crop that reacts the most to these packages in terms of yields.
- (ii) Agro-industrialization and processing: These drive a two-fold increase in value addition. Institutional arrangements and policies could facilitate and enable more processing to take place within value chains, notably through regional strategies and complementarities.

7. Conclusion

The maize sector continues to be hampered by multiple market and institutional failures. On the marketing side, maize value chain actors confront large seasonal price variability and variation in supply and quality. Institutional obstacles include the lack of an effective legal system and weak commercial and market transactions, all of which limit the growth potential for the agro-processing sector. Institutional reforms include provide support to credit schemes and incentives such as subsidizing collective storage for use in inventory credit. As was pointed out for other commodities, successful institutional reforms hinge on the emergence of credible and business-oriented producer organizations and enable to mediate between producers and credit institutions to facilitate adoption of new technologies and to perform collective purchases and sales.

From the analysis of different types of intermediaries and value chain network, it is visible that the value chain is complex and problematic, especially for farmer and consumer. The study also identified several network structures for maize products. Value added innovations could easily explain the amount of added price for each product in marketing channel. In Bangladesh, the marketing channels are very lengthy and complex. Often involvement of some intermediaries seems to be redundant; their presence adds extra cost to the consumers, creating high marketing margins. This study can be useful for the establishment of strategies of marketing and value chain creation. Moreover, this study would also provide insights what issues/factors need to be addressed for future development of this industry.

7.1 Limitations of the Research

This paper attempts to illustrate the attributes and ideas generated by the current study however it has some limitations. This study did not take into consideration of the samples from different or separate geographical locations. So, people from other locations of Bangladesh may have different expectations. Although this research is primarily based on the primary data from the farmers, entrepreneurs, marketers, people related with supply chain, the findings cannot be generalized. This study has successfully examined the value chain and marketing implication expectation; future research may include examining the factors importance more deeply. In spite of all limitations there are lots of scopes for further study.

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